



AGENDA: January 11, 2011

4.8

CATEGORY: Consent

DEPT.: Public Works

TITLE: Stevens Creek Trail: Sleeper Avenue to Dale/Heatherstone—Award Construction Contract and Related Actions

RECOMMENDATION

1. Award the construction contract for Stevens Creek Trail from Sleeper to Dale/Heatherstone, Construction, Project 10-42, to Gordon N. Ball of Alamo, California for the low bid price of \$4,137,649.
2. Accept and appropriate an \$800,000 State River Parkways grant to Stevens Creek Trail, Sleeper to Dale/Heatherstone, Construction, Project 10-42, and authorize the City Manager to execute a standard grant agreement with the State of California Natural Resources Agency. (Five votes required)
3. Transfer \$245,233 from Project 10-42 to the Construction Tax/Real Property Conveyance Tax Fund and transfer \$454,767 from Project 10-42 to the Open Space Acquisition Reserve. (Five votes required)
4. Authorize the City Manager to execute a contract amendment with the engineering design firm Mark Thomas & Company of San Jose, for a not-to-exceed amount of \$40,672 from Stevens Creek Trail, Sleeper to Dale/Heatherstone, Design, Project 07-35.
5. Authorize the City Manager to execute a professional services agreement with Signet Testing Labs for construction testing services for a not-to-exceed amount of \$88,440 from Stevens Creek Trail, Sleeper to Dale/Heatherstone, Construction, Project 10-42.
6. Approve the removal of two Heritage trees and the Urban Forestry Board recommended mitigation measure of 3:1 replacement with 15-gallon trees.

FISCAL IMPACT

Stevens Creek Trail, El Camino Real to Dale/Heatherstone—Design, Project 07-35, is funded with \$1.2 million from the following sources:

Shoreline Community Fund	\$ 485,000
Construction/Conveyance Tax Fund	415,000
Transportation Fund for Clean Air Grant	275,000
PG&E Easement Fee	<u>25,000</u>
Total Project Budget	<u>\$1,200,000</u>

The current balance in Project 07-35 is \$77,000, and there is sufficient funding for the recommended contract amendment with Mark Thomas & Company.

Stevens Creek Trail from Sleeper to Dale/Heatherstone, Construction, Project 10-42, is funded with \$5 million from the following sources:

Stevens Creek Trail, Project 10-42

Shoreline Community Fund	\$1,250,000
Park Land Fund	2,037,767
Open Space Acquisition Reserve	504,000
Construction/Conveyance Tax Fund	245,233
Transportation Development Act (TDA) Grant	418,000
Transportation Fund for Clean Air (TFCA) Grant	400,000
Santa Clara Valley Water District Trails Grant	<u>145,000</u>
Total Project Budget	<u>\$5,000,000</u>

Based on the low bid from Gordon Ball, the current cost estimate is \$4,969,000 which is within the project budget but leaves a project contingency of only \$31,000.

The California Natural Resources Agency awarded an \$800,000 State River Parkways Grant to the City for the Stevens Creek Trail construction. The recommended actions would allocate the \$800,000 grant to the project, return \$700,000 from the project to City funds (\$245,233 to Construction/Conveyance Tax and \$454,767 to the Open Space Acquisition Reserve) and increase the project contingency by \$100,000. The additional project contingency would be used for unforeseen needs that may include additional coordination with regulatory agencies or Caltrans during construction, additional services from biologists or other professionals, or additional staff time should construction or project close-out take longer than anticipated. Any unused balance would be returned to various City funding sources upon project completion.

BACKGROUND AND ANALYSIS

On July 27, 2010, the Council approved the plans and specifications for Stevens Creek Trail from Sleeper Avenue Neighborhood Access Point over Highway 85 to Dale/Heatherstone, Project 10-42, and authorized staff to advertise the project after receipt of the Caltrans encroachment permit. In early November 2010, Caltrans issued the encroachment permit, which allowed the project to begin the four-week bid advertisement period.

On December 8, 2010, the City received four bids ranging from \$4.14 million to \$4.56 million. The lowest responsible bid is from Gordon N. Ball, Inc. of Alamo, California. The City has contracted with Gordon N. Ball to construct the Permanente Creek Trail pedestrian overcrossing over Highway 101. The bid summary is included as Attachment 1.

When Council approved the plans in July 2010, the Engineer's Estimate for construction was \$4.05 million. Staff believes that the low bid was higher than this estimate for the following reasons:

- Additional stormwater reporting requirements were added to the specifications in response to Caltrans requirements.
- The concrete piles nearest the residences on Dale and Heatherstone Avenues were changed from driven to drilled to reduce the noise and vibration impacts on the residents.
- Additional landscaping was added to increase the likelihood that the City would receive the \$800,000 River Parkways Grant. Additional information is provided later in this report.
- The July Engineer's Estimate mistakenly included a quantity of reinforcing steel (rebar) that was too low.

Based on the number and value of bids received, staff considers the low bid to be fair and reasonable. Based on the low bid, the estimated project cost is as follows:

Construction (including \$350,000 construction contingency)	\$4,137,650
Construction Inspection and Testing	190,000
Construction Support by Mark Thomas Engineers	147,000
Caltrans Inspection Fee	40,000
City Project Engineering and Management	35,000
CHP Assistance during Freeway Detour and Closure	25,000
PG&E Electrical Meter Service	20,000
Nursery Native Plant Growing Services	5,000
Bid Services and Plan Reproduction	5,000
Preparation of As-Built Drawings	23,000
Landscape Architect Services	38,000
City Administration (6.5 percent)	<u>303,000</u>
Subtotal (rounded)	\$4,969,000
Project Contingency	<u>31,000</u>
CURRENT BUDGET	<u>\$5,000,000</u>

The recommended construction contract includes a construction contingency of \$350,000, which is approximately nine percent (9%) of the total of the bid items and is typical for a construction contract of this type. The construction contingency is an allowance used to pay the contractor for unforeseen expenses during construction. The "project contingency" is the unallocated project budget that could be used for unforeseen nonconstruction items which may include additional coordination with regulatory agencies or Caltrans during construction, additional services from biologists or other professionals, or additional staff time should construction or project close-out take longer than anticipated. Based on the current estimate, the project contingency is \$31,000, which is less than one percent (1%) of the project budget and is very low for a project of this complexity. Staff recommends using a portion of the River Parkways grant to increase the project contingency by \$100,000. Any unused portion of the project contingency at the end of the project would be returned to various City funds.

State and Federal Grants

On September 14, 2010, the California Natural Resources Agency announced that the City would receive an \$800,000 grant under the (State Proposition 84) River Parkways Grant Program. The City is one of 31 agencies out of 125 applicants State-wide to receive this competitive State park grant. The goals of the River Parkways program include protecting

and restoring riparian and riverine habitat and providing important recreational, open space, wildlife and other benefits to communities in the State.

After review of the City's application and the project site by an evaluation team, State representatives indicated that the project should include additional native plantings to enhance the riparian restoration and wildlife habitat aspect of the project and interpretive boards for trail users to enhance the project's recreational and educational value. Additional landscaping was added to the project, including additional trees and shrubs to buffer the bridge structure from the creek, and two interpretive boards are planned that are similar to others along the trail and at Shoreline. Though these elements add a cost of about \$100,000 to the project, they also add value to the trail and were important to remain competitive for the \$800,000 grant. Staff recommends accepting the grant and authorizing the City Manager to execute a standard agreement with the State Resources Agency (Attachment 2).

On July 27, 2010, the City Council discussed delaying the approval of plans and specifications due to the possibility of receiving a \$4 million Federal earmark. The Stevens Creek Trail did not make the final U.S. House of Representatives' appropriations list for Fiscal Year 2011 funding. A future phase of Stevens Creek Trail beyond Dale/Heatherstone to Mountain View High School is still under consideration when Congress takes action to authorize the next Federal transportation bill in 2011 or 2012.

Design Services Contract—Additional Services

Mark Thomas Engineers prepared the plans for the project and incurred additional redesign expenses to address new requirements imposed by Caltrans. The additional services included the redesign of the pedestrian structure from a 10' to 12' wide structure, modifying the Dale/Heatherstone area to accommodate a wider pedestrian switchback structure and narrowing of the street, implementing new storm water discharge regulations that recently became effective State-wide, and architectural enhancements and pedestrian lighting on the bridge. The additional services are described in Mark Thomas Engineers' letter of December 10, 2010 and are valued at \$40,672 (Attachment 3). Staff considers the scope and fee to be reasonable and recommends that Council approve a contract amendment to pay Mark Thomas for the services. The Stevens Creek Trail design budget, Project 07-35, has a balance of \$77,000 which is sufficient to fund the amendment.

Agreement for Construction Testing Services

On November 29, 2010, staff received three proposals for special inspection and testing services. Staff recommends awarding a contract to Signet Testing Laboratory because they provided the most complete proposal at the lowest cost. The proposed contract amount of \$88,440 is within the budget for special inspection and testing services (Attachment 4).

Removal of Additional Heritage Trees

Prior to constructing the pedestrian structure at Dale/Heatherstone, PG&E will need to relocate an overhead electrical service line from the west side of Dale/Heatherstone to the east side of the street. The alignment of the relocated electrical line will cross the path of two Heritage trees. PG&E's policy and a PUC regulation prohibit any tree from being within 15' of the new electrical line. On December 8, 2010, the Urban Forestry Board reviewed the project mitigation and recommended that City Council approve replacement of the two Heritage trees at a 3:1 ratio as part of the project. Although the Urban Forestry Board staff report (Attachment 5) recommended a 1:1 mitigation, the Urban Forestry Board approved a recommendation of a 3:1 mitigation. This action was necessary to be consistent with the project's mitigation monitoring program that was approved in 2004 as part of the Environmental Impact Report. The project includes the planting of 111 trees and over 1,600 shrubs.

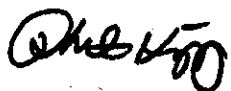
Project Schedule

Construction is expected to start by late February 2011 and be open by December 2011.

PUBLIC NOTICING

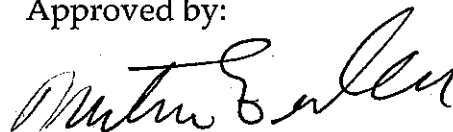
Agenda posting. A public meeting was held on August 27, 2009 at the Palo Alto Medical Foundation (PAMF) and several notices were sent during project planning and design to residents and businesses in close proximity to the project. A second neighborhood meeting is scheduled to take place on January 21, 2011 at the PAMF. Notices of the project schedule and pile driving activities will be mailed prior to construction. Additional notices of the construction-related impacts will be provided to area residents and businesses during construction.

Prepared by:



Robert Kagiya
Principal Civil Engineer

Approved by:



Michael A. Fuller
Public Works Director



Kevin C. Duggan
City Manager

- Attachments:
1. Bid Summary
 2. River Parkways Grant Agreement
 3. Mark Thomas & Company Fee Proposal
 4. Signet Testing Services Fee Schedule
 5. Urban Forestry Board Report

cc: Ms. Marilou Ayupan, Program Manager
Mark Thomas & Company
1960 Zanker Road
San Jose, CA 95112

Mr. Bruce Hill, Principal
Hill Associates
479 North Santa Cruz Avenue
Los Gatos, CA 95030-5300

Caltrans District 4
Attention Nick Salah, Regional Project Manager
P.O. Box 23660
Oakland, CA 94623-0660

Mr. Brad Juarros
The Natural Resources Agency
Bonds and Grants Unit
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Gordon N. Ball, Inc.
333 Camille Avenue
Alamo, CA 94507

Friends of Stevens Creek Trail

DE, SCE—Macaraeg, ACE—Chen, AE—Tran, POSM—Hurlburt, SAA—Kiner,
SAA—Burgess, AA—Grimm, F/c

**STEVENS CREEK TRAIL, SLEEPER NEIGHBORHOOD ACCESS POINT
TO DALE AVENUE/HEATHERSTONE WAY, PROJECT 10-42**

SUMMARY OF BIDS

BID DATE: DECEMBER 8, 2010

RANK	CONTRACTOR	BID PRICE
1	GORDON N. BALL, INC.	4,137,649.40
2	ROBERT A. BOTHMAN, INC.	4,252,570.00
3	R. M. HARRIS CO.	4,420,859.10
4	MCM CONSTRUCTION, INC.	4,555,555.00

STATE CONTRACTOR LICENSE: CURRENT

CITY BUSINESS LICENSE: NEED TO APPLY



January 6, 2011

Robert Kagiya
Design Engineer
City of Mountain View
500 Castro Street
Mountain View, CA 94039

Dear Mr. Kagiya,

Congratulations on receiving an award from the Proposition 84 California River Parkways Grant Program. The Natural Resources Agency is pleased to award a grant of \$800,000 to the City of Mountain View for the Steven's Creek Trail Sleeper to Dale Heatherstone Project. We look forward to working with you in the coming months.

Please keep in mind that funding for project implementation, such as construction, is contingent upon full CEQA compliance. Agency staff will contact you within the next few weeks to begin developing your Grant Agreement. Should you have any questions in the interim, please do not hesitate to contact Brad Juarros, Grants Administrator, Bonds and Grants, at (916) 651-7584 or via e-mail at brad.juarros@resources.ca.gov.

Please coordinate any public announcements related to your project with our Assistant Director for Communications Clark Blanchard. Mr. Blanchard can be reached at (916) 651-7585 or via e-mail at clark.blanchard@resources.ca.gov.

By working together we can restore, preserve, and enhance California's natural resources in a way that allows them to be enjoyed by our citizens and communities for decades to come.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan Cash". The signature is stylized with large, sweeping loops. Below the signature, the name "Bryan Cash" is printed in a small, sans-serif font.

1416 Ninth Street, Suite 1311, Sacramento, CA 95814 Ph. 916.653.5656 Fax 916.653.8102 <http://resources.ca.gov>

Baldwin Hills Conservancy • California Coastal Commission • California Coastal Conservancy • California Conservation Corps • California Tahoe Conservancy • Central Valley Flood Protection Board
Coachella Valley Mountains Conservancy • Colorado River Board of California • Delta Protection Commission • Delta Stewardship Council • Department of Boating & Waterways • Department of Conservation
Department of Fish & Game • Department of Forestry & Fire Protection • Department of Parks & Recreation • Department of Resources Recycling and Recovery • Department of Water Resources
Energy Resources, Conservation & Development Commission • Native American Heritage Commission • Sacramento-San Joaquin Delta Conservancy • San Diego River Conservancy
San Francisco Bay Conservation & Development Commission • San Gabriel & Lower Los Angeles Rivers & Mountains Conservancy • San Joaquin River Conservancy
Santa Monica Mountains Conservancy • Sierra Nevada Conservancy • State Lands Commission • Wildlife Conservation Board





MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying and Planning Services

Prepared December 10, 2010

City of Mountain View
STEVENS CREEK TRAIL, REACH 4-SEGMENT 2: PHASE II
STEVEN CREEK TRAIL PEDESTRIAN OVERCROSSING (POC) OVER ROUTE 85
(Sleeper Open Space to Dale/Heatherstone Way)

Additional Design Services Request
SCOPE OF SERVICES AND FEE PROPOSAL
 for
Stevens Creek Trail, Reach 4-Segment 2: Project No. 10-42

PHASE II- DESIGN PHASE

SCOPE OF SERVICES

a) Re-design of a wider POC Bridge Section

The POC bridge width was initially proposed to be ten (10) feet wide similar to all existing Steven Creek Trail bridge and tunnel sections. The initial Type Selection Report submitted to Caltrans Structure dated August 12, 2009 proposed a 10-foot wide POC bridge deck. As part of the Permit Engineering Evaluation Report (PEER) process approval process, a Mandatory Design Exception Fact Sheet was required which identifies nonstandard design feature of the POC geometrics as it related the Section 1000, Bikeway Design of the Caltrans Highway Design Manual (HDM). To partially offset the negative effects of the project's proposed nonstandard 50-foot curve (versus 155-foot curve radius) of the POC and required stopping sight distance, Caltrans required that the POC be widened and provide a 12-foot clear width (versus the 10-foot standard clear width).

Items of work related to the design change included:

- Revisions and re-submittal of the Type Section Report
- Revisions to the Structure General Plan and Cost Estimate

b) Modification to Dale/Heatherstone Area

With the wider POC width, the geometrics of the bridge approach ramp (switch back) from the POC (over Route 85) to Dale/Heatherstone area had to be re-designed. The revised approach ramp alignment had to clear the existing Route 85 soundwall/foundation and Dale/Heatherstone Way roadway, which required the existing sidewalk to be re-aligned to provide more area for the switch back. With the new sidewalk alignment and bridge columns moving closer to the travel-way, the design team evaluated protection of the columns from moving vehicles negotiating around the existing Dale/Heatherstone Way curve alignment. These modifications to the Dale/Heatherstone Way area included

realignment of the existing sidewalk and design of special sidewalk railing along Dale/Heatherstone under the approach ramp to protect the bridge columns/bridge soffit.

Additional items of work related to the design change included:

- Evaluation of protecting the proposed bridge columns from traffic
- Realign Dale/Heatherstone Way with new sidewalk area
- Review MBGR options and design of special sidewalk railing
- Revision to Layout, Utility/Drainage and PD Plans
- Preparation of new Construction Detail
- Coordination with Hill Associates

c) Enhanced Detailing of Bridge Aesthetics

The proposed POC was bridge was designed with additional enhancements to the aesthetics of the CIP concrete barrier/steel fence railing/pilaster, the Slab Bridge (Approach Ramps) chain link railing/ bridge bents/columns and bridge entry stone veneer pilaster features (at each end of the barrier/railing). At the Type Selection meeting, Caltrans commented the POC shall be designed with pedestrian lighting (even though the City's current policy does not provide lighting for trails). The concrete pilaster was designed to accommodate this new lighting.

Additional items of work included in the design enhancements:

- Coordination with Hill Associates with various bridge aesthetic designs
- Coordination with AEC on the POC lighting
- Structural detailing of the CIP concrete barrier and steel fence railing
- Structural detailing of the Slab bridge chain link railing
- Structural detailing of the rectangular bridge bents
- Structural detailing of the stone veneer pilasters
- Update Structure Plans and Specifications

d) Compliance of New NPDES General Construction Permit

The State Water Resources Control Board issued a new National Pollutant Discharge Elimination System (NPDES) General Permit effective July 1, 2010 for storm water discharges associated with construction and land disturbance activities. The revised permit had new criteria for the evaluation storm water discharge and increased requirements for storm water sampling and reporting during construction.

Additional items of work included:

- Review of the Storm Water Discharge requirements
- Preparation of the project-specific Risk Level Assessment (RL 1 to RL 3)
- Preparation of new Specifications and bid items
 - Rain Event Action Plan
 - Storm Water Annual Report
 - Storm Water Sampling and Analysis Day
- Preparation of additional quantities

FEE PROPOSAL

Compensation of the design scope changes for already provided for the final design has been computed on an hourly (time and materials) basis, based on the Charge Rate Schedule (Old Effective April 2, 2007) attached hereto with a not-to-exceed total fee, as follows:

a) Re-Design of Wider POC Section

Design Engineer	20.0 hrs @ \$ 142.00/hr	\$ 2,840
Sr. Bridge Engineer	24.0 hrs @ \$ 192.00/hr	4,608
Structural Manager	12.0 hrs @ \$ 236.00/hr	2,832
<u>Engineering Manager</u>	<u>8.0 hrs @ \$ 236.00/hr</u>	<u>1,888</u>

Subtotal \$ 12,168

b) Modifications to Dale/Heatherstone Way

Design Engineer	24.0 hrs @ \$ 142.00/hr	\$ 3,408
Assistant Engineer	16.0 hrs @ \$ 105.00/hr	1,680
Structural Manager	8.0 hrs @ \$ 236.00/hr	1,888
<u>Engineering Manager</u>	<u>10.0 hrs @ \$ 236.00/hr</u>	<u>2,360</u>

Subtotal \$ 9,336

c) Enhanced Detailing of Bridge Aesthetics

Design Engineer	16.0 hrs @ \$ 142.00/hr	\$ 2,272
Sr. Bridge Engineer	30.0 hrs @ \$ 192.00/hr	5,760
<u>Structural Manager</u>	<u>12.0 hrs @ \$ 236.00/hr</u>	<u>2,832</u>

Subtotal \$ 10,864

d) Compliance of new NDPES General Permit

Design Engineer	40.0 hrs @ \$ 142.00/hr	\$ 5,680
Assistant Engineer	16.0 hrs @ \$ 105.00/hr	1,680
<u>Engineering Manager</u>	<u>4.0 hrs @ \$ 236.00/hr</u>	<u>944</u>

Subtotal \$ 8,304

TOTAL FOR PHASE II -DESIGN FEE: \$ 40,672



November 29, 2010

Rodrigo Macaraeg
City of Mountain View
Public Works Department
500 Castro Street, PO BOX 7540
Mountain View, CA 94039-7540

**Subject: STEVENS CREEK TRAIL REACH 4, SEGMENT 2 PHASE II: SLEEPER
NEIGHBORHOOD ACCESS POINT TO DALE AVE/HEATHERSTONE WAY,
PROJECT 10-42, REQUEST FOR SPECIAL INSPECTION PROPOSAL**

Dear Mr. Macaraeg:

Signet Testing Labs is pleased to present our proposal to the City of Mountain View for the Stevens Creek Trail Project. Signet will be able to meet and exceed all the requirements outlined in your RFP dated November 4, 2010 by providing the City with consistent inspection and testing staff that is certified and experienced in the required disciplines. This proposal will be valid for a minimum of ninety days.

Signet Testing Labs fully understands the responsibilities and duties required for this project as it relates to materials testing and inspection. We have a proactive culture of planning and anticipating project needs with an ultimate objective of addressing all project issues immediately, communicating and collaborating with all stakeholders, and most importantly assuring compliance with project requirements. Our dedicated and committed project team will work closely with all team members throughout the project, providing the highest levels of service and communication.

Please note that Signet Testing Labs, Inc. is subject and signatory to agreements with the International Union of Operating Engineers, AFL-CIO covering inspection and testing personnel. These agreements conform to the state prevailing wage requirements noted in Amended Code Section 1720 of Senate Bill 1999.

Signet Testing Labs looks forward to the opportunity to serve the City of Mountain View. I am personally committed to the highest level of customer service and will be available at your convenience to discuss any aspects of our proposal. On behalf of all the employees at Signet Testing Labs, Inc., we thank you for this opportunity and look forward to the possibility of working with you.

Respectfully submitted,
SIGNET TESTING LABS, INC.

A handwritten signature in black ink, appearing to read "Tim Rodríguez", written over a horizontal line.

Tim Rodríguez
Operations Manager

**Budget Estimate to Provide
Special Inspections and Material Testing Services**

I. FIELD AND LABORATORY SERVICES		Qty	Rate	Amount
A. Earthwork / Soils / Paving				
1. Field Compaction / Testing	15 day(s)	120 hour(s)	\$80.00 /hr	\$9,600.00
2. Trip Charge (within 50 miles of Office)		15 day(s)	\$35.00 /day	\$525.00
3. Moisture Density Curve - 6" Mold		2 each	\$275.00 /ea	\$550.00
4. Test Maximum Density (TMD - Set of 5)		1 each	\$400.00 /ea	\$400.00
5. Sieve Analysis - Total Sieve (to 1-1/2" max)		1 each	\$190.00 /ea	\$190.00
6. Bitumen Content (by ignition oven)		1 each	\$200.00 /ea	\$200.00
6. Sand Equivalent - Aggregate		1 each	\$100.00 /ea	\$100.00
B. Reinforced Concrete				
1. Rebar Placement Inspection	20 visit(s)	80 hour(s)	\$75.00 /hr	\$6,000.00
2. Concrete Placement Inspection	20 visit(s)	80 hour(s)	\$75.00 /hr	\$6,000.00
3. Rebar / Strand ID Sampling / Tagging	4 visit(s)	16 hour(s)	\$75.00 /hr	\$1,200.00
4. Trip Charge (within 50 miles of Office)		24 day(s)	\$35.00 /day	\$840.00
5. Material Sampling / Transportation	20 trip(s)	20 hour(s)	\$75.00 /hr	\$1,500.00
6. Concrete Compression Test - Cylinder		52 each	\$35.00 /ea	\$1,820.00
7. Sieve Analysis - Total Sieve (to 1-1/2" max)		20 each	\$190.00 /ea	\$3,800.00
8. Cleanness Value - 1" maximum		20 each	\$150.00 /ea	\$3,000.00
9. Sand Equivalent - Aggregate		20 each	\$100.00 /ea	\$2,000.00
C. Structural Steel				
1. Shop Welding Inspection	8 day(s)	64 hour(s)	\$75.00 /hr	\$4,800.00
2. Field Welding Inspection	8 day(s)	64 hour(s)	\$75.00 /hr	\$4,800.00
3. Field UT Testing	2 day(s)	16 hour(s)	\$80.00 /hr	\$1,280.00
4. Trip Charge (within 50 miles of Office)		18 day(s)	\$35.00 /day	\$630.00
D. Specialty Testing				
1. CIDH - Gamma Gamma Logging	5% Administrative Markup on Outside Services			\$27,930.00
*Provided by Abe Construction Services - Quote Attached				
2. Concrete Pile / Pier Inspection	10 day(s)	80 hour(s)	\$75.00 /hr	\$6,000.00
3. Field Technician / Inspector	5 day(s)	40 hour(s)	\$75.00 /hr	\$3,000.00
4. Trip Charge (within 50 miles of Office)		15 day(s)	\$35.00 /day	\$525.00
E. Engineering/Administration				
1. Project Manager		8 hour(s)	\$125.00 /hr	\$1,000.00
2. Final Affidavit		1 each	\$250.00 /ea	\$250.00
3. Mix Design Review		2 each	\$250.00 /ea	\$500.00
Total Budget Estimate:				\$88,440.00

PROFESSIONAL SERVICES**PROFESSIONAL SERVICES**

1000	Expert Witness	250.00/hour
1005	Principal Engineer	185.00/hour
1010	Geotechnical Engineer	165.00/hour
1015	Project Engineer	145.00/hour
1020	Staff Engineer	125.00/hour
1025	Project Manager	125.00/hour
1030	Quality Control Manager	110.00/hour
1050	Field Technician / Inspector	75.00/hour
1035	Laboratory Technician	75.00/hour
1040	Technical Assistant, Draftsman	65.00/hour
1045	Administrative Services	65.00/hour
9910	Contract Labor	Cost + 20%

INSPECTION SERVICES**Soils / Asphalt Division:**

2001	Field Compaction / Testing	80.00/hour
2104	Soils Observation	75.00/hour
2110	Material Sampling / Transportation	75.00/hour
2205	Pile / Pier Observation	75.00/hour
2102	AC Compaction Testing	80.00/hour
2105	AC Batch Plant Inspection / Sampling	75.00/hour
2111	AC Observation	75.00/hour

Concrete / Shotcrete Division:

3103	Concrete Placement Inspection	75.00/hour
3104	Concrete Sampling Only	75.00/hour
3105	Batch Plant Inspection	75.00/hour
3110	NS Grout Inspection / Sampling	75.00/hour
3123	Concrete Pile / Pier Inspection	75.00/hour
3501	DSA Shotcrete Placement Inspection	85.00/hour
3503	Shotcrete Placement Inspection	75.00/hour

Reinforcing / Strand Steel Division:

3102	Rebar Placement Inspection	75.00/hour
3509	Rebar / Strand ID Sampling / Tagging	75.00/hour
3208	PT Strand Stressing Inspection	75.00/hour

Masonry Division:

3701	DSA Continuous Masonry Inspection	85.00/hour
3703	Continuous Masonry Inspection	75.00/hour
3706	Masonry Brick / Veneer Inspection	75.00/hour
3710	Periodic Masonry Inspection	75.00/hour
3715	Masonry Sampling / Tagging	75.00/hour

Structural Steel Division:

5101	Field Welding Inspection	75.00/hour
5103	High strength bolting	80.00/hour
5104	Field UT Testing	80.00/hour
5105	Field MT Testing	80.00/hour
5106	Field PT Testing	80.00/hour
5201	Shop Welding Inspection	75.00/hour
5204	Shop UT Testing	80.00/hour
5202	Shop MT Testing	80.00/hour
5203	Shop PT Testing	80.00/hour

Fireproofing / Roof / Wood / Waterproofing Division:

6002	Fireproofing Density / Thickness Testing	75.00/hour
7003	Roofing Placement Inspection	80.00/hour
7004	Diaphragm Nailing Inspection	80.00/hour
7005	Shearwall Nailing Inspection	80.00/hour
7060	Waterproofing Inspection	80.00/hour
7070	Framing Inspection	80.00/hour

Specialty Testing Division:

9001	Proof Load / Torque Testing	80.00/hour
9006	Witness Dowel / Anchor Installation	75.00/hour
9008	Pachometer / Profometer Survey	80.00/hour
9011	Ground Penetrating Radar Survey (GPR)	200.00/hour
8161	Floor Flatness Survey (Dipstick)	155.00/hour
8220	Moisture Emission Testing Placement / Pick-Up	85.00/hour
7052	Moisture Content Testing	85.00/hour
9703	Coatings Inspection	85.00/hour
3108	Coring Technician, One Man	175.00/hour

Oversight Inspections:

4801	IOR Inspector of Record	125.00/hour
4802	Mechanical/Electrical/Plumbing Inspection	95.00/hour
4808	General Oversight Inspection	85.00/hour

LABORATORY TESTING**AGGREGATE****GRADING (MECHANICAL SIEVE ANALYSIS)**

ASTM C136/CTM 202	
4203 Coarse aggregate (to 1-1/2" maximum)	90.00/each
4204 Coarse aggregate (1-1/2" +)	175.00/each
4205 Total sieve (to 1-1/2" maximum)	190.00/each
4206 Fine aggregate	125.00/each

ASTM C88/CTM 214

Sodium or magnesium sulfate soundness, fine or coarse,	
4207 5 cycles, per sieve size (minimum charge \$300.00)	100.00/each

ASTM C40/CTM 213

4209 Organic impurities in sands for concrete	90.00/each
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ASTM C29/CTM 212

4210 Unit weight (average of 3 tests)	100.00/each
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ASTM C142

4211 Clay lumps in natural aggregate	120.00/each
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ASTM D2419/CTM 217

4212 Sand equivalent tests	100.00/each
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CTM 227

4213 Cleaness value - 1" maximum	150.00/each
4214 Cleaness value - 1-1/2" x 3/4"	300.00/each

ASTM C128, C127/CTM 206, 207

4215 Specific gravity & absorption, fine aggregate	150.00/each
4216 Specific gravity & absorption, coarse aggregate	150.00/each
4217 Absorption test only, fine or coarse aggregate	100.00/each

ASTM C131/CTM 211

4219 Los Angeles Rattler Test, 500 revolutions	175.00/each
4220 Los Angeles Rattler Test, 100 & 500 revolutions	200.00/each

ASTM C535

4221 Los Angeles Rattler Test for large size coarse aggregate,	
1000 revolutions	300.00/each

ASTM C84/CTM 515

4222 Measuring mortar-making properties of fine aggregate	500.00/each
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CTM 205

4225 Crushed particles	150.00/each
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ASTM D4791

4224 Flat and Elongated Particles	150.00/each
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4260 Acid Solubility	200.00/each
4224 Mohs Hardness	100.00/each

AASHTO T304

4245 Fine Aggregate Angularity	200.00/each
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CTM LP-2

4246 Calculate Voids in Mineral Aggregate	50.00/each
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SOIL MECHANICS**ASTM C136/CTM 202**

4226 Sieve analysis pit run with #200 wash	160.00/each
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ASTM D422/CTM 203

4227 Hydrometer analysis (does not include specific gravity)	250.00/each
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ASTM D854/CTM 203

4228 Specific gravity of soils by hydrometer	155.00/each
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ASTM D4318/CTM 204

4229 Plasticity index (Atterberg Limits)	200.00/each
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CTM 229

4230 Coarse aggregates	250.00/each
4231 Fine aggregates	250.00/each

ASTM D2844/CTM 301

4232 "R" Value, California State Highway, untreated material	300.00/each
4233 "R" Value, California State Highway, cement, lime, or other additives laboratory mixed	325.00/each
4234 "R" Value, California State Highway, cement, lime, or other additives field sample	300.00/each

ASTM D1557/AASHTO T180

4235 Moisture/density curve 4" mold	250.00/each
4236 Moisture/density curve 6" mold	275.00/each
4208 Rock Correction of Moisture/density curve	50.00/each

CTM 216F/CTM 216G

4237 California impact, dry method	275.00/each
4238 California impact, wet method	275.00/each
4239 Moisture density checkpoint for identification of material	125.00/each

ASTM D1883

4240 California bearing ratio, 3 points without curve	600.00/each
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ATM D569/D560/D1633

4241 Compressive strength of cement treated soil (soil/cement mixed and specimen fabricated in the laboratory)	150.00/each
4242 Compaction and compressive strength of cement treated soil from field sample	100.00/each
4243 CTB Design	5,200.00/each

CTM 373

4247 Unconfined Compressive Strength, Treated Soil at 1 Content	600.00/each
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CTM 312

4250 Cement Treated Base (CTB) Design	2,000/each
4244 Compaction and compressive strength of CTB	150.00/each

ASTM D2216/CTM 226

4218 Moisture content of soils (by oven drying)	40.00/each
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ASTM D854/CTM 209

4248 Specific Gravity of Soil	80.00/each
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ASTM D1140

4202 #200 Wash on Soil	100.00/each
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ASTM D2974

4256 Peat Moisture, Ash Content	150.00/each
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CTM 643/AASHTO T-228

4401 Minimum Resistivity	150.00/each
4402 pH of Soil	75.00/each

ASPHALTIC CONCRETE

CTM 304/366/305	
4101 Stabilometer value of bituminous paving mixture, lab mixed.....	500.00/point
4102 Stabilometer value of premixed sample	350.00/each
4103 Swell test of bituminous mixture.....	130.00/each

CTM 304/307	
4113 Moisture vapor susceptibility including stabilometer (2 specimens)	250.00/each

CTM 382/D6307	
4129 Bitumen content of paving mixture (by ignition oven)	200.00/each (subject to environmental disposal surcharge)
4104 Correction Factor.....	300.00/each

ASTM D5444/CTM 202	
4105 Gradation of extracted sample including #200 wash.....	150.00/each

ASTM D1559	
4106 Marshall test, premixed sample 3 specimens	300.00/each
4107 Marshall test, lab mixed 3 specimens.....	400.00/each
4109 Asphalt concrete design: Marshall Method - no aggregate	2,400.00/each
4112 Asphalt concrete design: Marshall Method - with aggregate	2,800.00/each
4110 Asphalt concrete design: Hveem method - no aggregate.....	2,200.00/each
4111 Asphalt concrete design: Hveem method - with aggregate	2,500.00/each

4138 Marshall RAP Mix Design with Aggregate Tests, AI MS-2	4000.00/each
4139 Caltrans RAP Mix Design with Aggregate Tests, CTM 367	3600.00/each

ASTM D2728/CTM 308	
4114 Specific gravity of compacted sample	60.00/each

ASTM C136/CTM 202	
4201 Sieve analysis of aggregates per "bin sample"	160.00/sample

CTM 308A/D1188	
4115 Specific gravity of AC - paraffin coated.....	75.00/each

CTM 304/375	
4128 Test maximum density (TMD), set of 5 specimens	400.00/each

ASTM D2041	
4116 Rice Gravity.....	180.00/each

ASTM D1075	
4133 Index of retained strength, pre-mix	500.00/each
4134 Index of retained strength, lab mix	780.00/each

ASTM D4867/AASHTO	
4127 Tensile strength ratio, pre-mix	1,000.00/each
4117 Tensile strength ratio, lab mix.....	1,500.00/each

CTM 303	
4119 CKE Coarse	150.00/each
4120 CKE Fine	150.00/each
4132 Filmstripping, CTM 302.....	175.00/each

4121 ATPB mix evaluation (grade, recombine, mix @ 2.0%, 2.5%, 3.0%)	320.00/each
4122 Open graded mix evaluation (grade, recombine, mix @ 3 oil percentages, filmstripping), CTM 368	440.00/each

CTM 370	
4123 Moisture content of AC by microwave oven.....	75.00/each
4126 Index Retained Stability - lab mix	650.00/each
4125 Index Retained Stability - pre mix.....	500.00/each

4135 Calculate Voids Filled with Asphalt, CTM LP-3.....	30.00/each
4136 Calculate Dust Proportion, CTM LP-4	30.00/each
4137 Calculate Air Voids of HMA, CTM 357	20.00/each

CONCRETE / SHOTCRETE

ASTM C39/C567	
3111 Compression tests, 6" diameter x 12"	35.00/each
3112 Unit weight on concrete cylinder	45.00/each

ASTM C495	
3117 Lightweight insulating concrete (3" diameter x 6" cylinder) Compression tests.....	50.00/each

ASTM C469	
9314 Static Young's modulus of elasticity in compression of 6" diameter x 12" cylindrical specimen	350.00/each
3119 Splitting tensile test, 6" diameter x 12" cylinder	60.00/each

ASTM C512	
9315 Creep of Concrete in compression 3-months, set of 5	400.00/each
9316 Equilibrium Density ASTM C567	165.00/each

ASTM C42/C39	
3118 Compression test concrete cores	55.00/each
3510 Shotcrete core compressive strength	95.00/each

ASTM C78/C293	
3135 Flexural strength of concrete, 6" x 6" x 24" specimen	90.00/each

ASTM C157 (MODIFIED)	
3115 Volume change of concrete, per set of 3 (drying shrinkage test), up to 28 days drying (excludes trial batch)	400.00/each

ASTM C109	
3113 Compression Tests, 2" cube specimen	45.00/each

ASTM C192	
3136 Laboratory Trial Batch (testing of specimens excluded)	500.00/each

MASONRY

ASTM C140	
9401 Gross Area Compression	80.00/each
9405 Net Area Compression	90.00/each
9402 Absorption and moisture content (*)	90.00/each
9403 Linear shrinkage (rapid method) (*)	120.00/each

ASTM C426	
9406 Linear shrinkage (ASTM C426) (*)	160.00/each
9408 Unit Weight (*)	55.00/each
9404 Dimensional measurements/Equivalent web thickness (*)	40.00/each

UBC Standard	
3711 2" x 4" mortar cylinder	40.00/each
3713 grout sample	40.00/each
3708 composite prism	160.00/each

ASTM C1006	
9407 Splitting tensile (*)	80.00/each
3717 Compression Test of Concrete Masonry Unit Core (CBC Title 24)	55.00/each
3718 Shear Test of Concrete Masonry Unit Core (CBC Title 24)	55.00/each

ASTM C531	
9317 Linear Shrinkage and Coefficient of Thermal Expansion	500.00/each

3134 Sample Pick-up	70.00/each
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GEOTECHNICAL DIVISION

INDEX TESTS

2221 Moisture Content D2216 33.00/each

Moisture and Density

2222 "U" type sample 42.00/each
 2223 Piston Sample 42.00/each
 2224 Pitcher/Shelby sample 45.00/each

Liquid and Plastic Limits D4318

2225 Method "B" (Dry prep) 160.00/each
 2226 Method "A" (Wet prep) 160.00/each

Particle Size Analysis

2227 % passing #200 sieve D1140 75.00/each
 2228 Sieve (from 1/2" to #200) D422 90.00/each
 2229 Sieve (from 1" to #200) D422 110.00/each
 2230 Sieve (from 2" to #200) D422 130.00/each
 2231 Hydrometer test D422 250.00/each
 2232 Specific Gravity D854 155.00/each
 2233 Organic Content D2974 90.00/each
 2234 Visual Classification 20.00/each
 2235 Pinhole D4647 225.00/each
 2286 pH Determination Soil/Lime D6276 130.00/each

COMPACTION TESTS:

Standard Proctor D698

2237 4" mold 250.00/each
 2238 6" mold 275.00/each

Modified Proctor D1557

2239 4" mold 250.00/each
 2240 6" mold 275.00/each

One Point Compaction

2241 4" mold 60.00/each
 2242 6" mold 60.00/each
 2243 California Impact Test (CTM 216) 275.00/each

HYDRAULIC CONDUCTIVITY:

Rigid Wall

2247 Falling head (specimen ht. ~1") 260.00/each
 Additional Costs
 2248 Additional stress level 72.00/each
 2249 To remold stress specimen 52.00/each

Flexible Wall D5084

2250 Sandy soil 260.00/each
 2251 Clayey soil 350.00/each
 Additional costs
 2252 Additional stress level 95.00/each
 2253 To remold test specimen 100.00/each
 2254 Compatibility 500.00/each

CONSOLIDATION PROPERTIES:

2255 Consolidation Test (1 cycle, 1 time rate) D2435 325.00/each
 2257 For each additional Time-Rate curve 100.00/each
 2258 To add unload-Reload cycle 26.00/each
 2259 Trim to test from 3" sample 52.00/each
 2260 To remold test specimen 100.00/each

Expansion Test D4829

2261 Expansion Index 130.00/each
 2262 % Swell D5333 200.00/each
 2263 % Collapse 129.00/each
 2264 Shrink-Swell 165.00/each
 2265 Expansion pressure 105.00/each

STRENGTH TESTS:

2267 Unconfined compression D2166 95.00/each
 2268 Lab-vane shear 100.00/each
 2269 Torvane/P.Penetrometer 20.00/each

Triaxial Tests, per point (2.5" dia.)

2270 Unconsolidated-Undrained UU D2850 125.00/each
 2271 Unconsolidated-Undrained UU D2850 over 70psi 150.00/each

Consolidated-Undrained with pore pressure

2272 CU with PP D4767 450.00/each
 2277 Staged TXCU with pore pressure 1,200.00/each
 2273 Consolidated-Drained CD (sandy soil) 700.00/each
 Additional costs
 2276 To remold for test specimen 100.00/each
 2275 For multi-stage, each additional stress level 300.00/each

Direct Shear Tests, per point (2.5" diameter)

2278 Unconsolidated-Undrained UU 95.00/each
 2279 Consolidated-Undrained CU 115.00/each
 2280 Consolidated-Drained CD (sandy soil) D3080 155.00/each
 2281 Consolidated-Drained CD (clayey soil) 180.00/each

Additional costs

2282 Preparation for 3" diameter specimen 52.00/each
 2283 To remold for test specimen 36.00/each
 2284 For multi-stage, each additional stress level 52.00/each
 2285 For each re-shear cycle 62.00/each
 2244 Photos 30.00/each

BRICK

ASMT C67	
9409 Compression test.....	60.00/each
9411 Absorption test, saturation coefficient.....	70.00/each
9306 Modulus of rupture.....	55.00/each

CLAY ROOFING TILE

9418 UBC Standard 32-12 Breaking Load.....	50.00/each
9419 Water Absorption by 24-hour Oven Drying	
Extra charge for cutting/preparation.....	50.00/each

BUILT UP ROOFING

7026 Basic weight analysis.....	200.00/each
ASTM D2829	
7025 Ply separation and complete roof analysis.....	500.00/each

FIREPROOFING

6004 Density of sprayed-on fireproofing.....	80.00/each
6010 E736 Cohesion/adhesion testing lid w/hook.....	90.00/each
6005 Moisture Content of Sprayed-on Fireproofing.....	50.00/each

STRUCTURAL STEEL AND CARBON STEEL

(Sample preparation and machining not included)

Tensile Testing - yield, ultimate, elongation	
9510 To 1" material thickness, inclusive.....	60.00/each
9517 Over 1" up to 1-1/2" thickness.....	70.00/each
9539 Over 1-1/2" thickness.....	90.00/each
9519 End-Welded "Nelson" Studs.....	60.00/each

Cold Bend Testing:	
9511 To 3/4" material thickness.....	35.00/each
9518 Over 3/4" up to 1-1/4" thickness.....	50.00/each

Flattening Tests on Pipe:	
9508 To 10" diameter and 3/4" max. wall.....	60.00/each
9543 Guided Side, Root or Face Bends and T-Break.....	20.00/each
9601 Standard Welder Qualification Test.....	295.00/each
9605 Macroetch Examination.....	50.00/each

REINFORCING STEEL

Tensile Testing Full Section (yield/ultimate/elongation):	
9501 Bar Size through #8.....	85.00/each
9502 #9 through #11.....	95.00/each
9503 #14.....	120.00/each
9504 #18.....	145.00/each
9552 Coupled rebar through #11.....	140.00/each
9553 Coupled rebar through #14.....	160.00/each
9554 Coupled rebar through #18.....	190.00/each
9509 Cold Bend Testing on Bar Size #11 and smaller.....	50.00/each
9529 Cold Bend Testing on Bar Size #14.....	60.00/each

MECHANICAL TESTING OF METALLIC PRODUCTS

(sample preparation and machining not included)

9544 Yield strength, tensile, elongation, R/A for 1/2" diameter or subsize reduced-section specimen.....	60.00/each
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Hardness Testing (3 points/sample) (*)	
9513 Rockwell / Brinell.....	40.00/each

Charpy Impact Testing (minimum of 3 specimens):	
9520 Room Temperature.....	20.00/each
9521 To minus 100 degrees Fahrenheit.....	25.00/each
9522 To minus 150 degrees Fahrenheit.....	30.00/each

HIGH STRENGTH BOLTS, NUTS AND WASHERS

(Sample preparation and machining not included)

ASTM A325, A490 AND A449	
Bolts: to 1-1/8" diameter inclusive	
9526 Proof load.....	40.00/each
9514 Ultimate Tensile.....	50.00/each
9515 Hardness (Rockwell) (*) including sample preparation.....	85.00/each

Nuts: to 1-1/8" inclusive	
9535 Proof load.....	30.00/each
9536 Hardness (Rockwell) (*) including sample preparation.....	85.00/each

Washers: all sizes	
9536 Hardness (Rockwell) (*) including sample preparation.....	85.00/each
9516 Carburization Depth.....	60.00/each

ASTM F959	
9537 Load Indicator Washers (LIW), proof load.....	50.00/each

SPECIALTY TESTING

Seven-wire strands, ASTM A416	
For 1/4" through 1/2" strands	
9304 Breaking strength only.....	200.00/each
9305 Yield strength, breaking strength & elongation.....	250.00/each

ASTM A90	
9700 Weight of galvanized coating (subject to environmental disposal)...	150.00/each
9701 Other materials-aluminum, brass, bronze, fiberglass, etc.....	65.00/each

8257 Vapor Emission Test Kit.....	60.00/each
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9903 Calibration of hydraulic ram system.....	250.00/each
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9905 Laboratory Vendor.....	Cost + 20%
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For all test specimens that require material preparation (cutting, machining, etc.). An additional charge will be made to the above schedule.

Additional premium charges will be made for all rush work in excess of 8 hours, night shifts, holidays, and weekends.

Abe Construction Services, Inc.

2230 Lariat Lane, Walnut Creek, CA 94596 Phone: 925-944-6363 Fax: 925-476-1588 Email: SA@AbeEngineering.com

November 23, 2010

Estimate for CIDH Pile Testing Services

Stephens Creek Tril POC
Mountainview, CA

Attn:

Scope: Perform GGL on 83 CIDH piles @ 24" x 50 ft with 2 logs/pile at 10 Locations.
Assume testing 8 piles/day on average, 10 mobilizations and 10 reports.
Actual work performed billed per following rate schedule.

QTY.	DESCRIPTION	RATE / UNIT	COST
GGL FIELD TESTING			
166	GGL or CSL Charge for logs up to 50 ft long (Minimum field work charge is \$1200/day)	\$100.00 /log	\$16,600.00
0	Min Field Charge	\$1,200.00 /day	\$0.00
REPORT / ANALYSIS/ ENGINEERING CHARGES			
10	Test Report submittals	\$500.00 / each	\$5,000.00
0	Engineer for meetings, standby at site, or contract review	\$200.00 /hr	\$0.00
TRAVEL / MOB EXPENSES			
10	Equipment Mobilization/vehicle/ travel costs	\$500.00 / day	\$5,000.00
Total Estimate			\$26,600.00

Notes & Terms:

- a) At least 7 days notice; the job may then be postponed with 24 hrs notice if necessary without charges.
If we receive less than 7 days notice, additional mobilization expenses may be negotiated.
- b) Standby charge of \$200/ hr will be charged if engineer must wait for access to piles for testing
- c) Working conditions for our engineer which conform with OSHA requirements AND SAFE ACCESS TO PILES
This quote is valid for 90 days.
- d) All PVC inspection tubes **must** be BLOWN DRY PRIOR TO TESTING AND SOUNDED WITH A DUMMY PROBE TO ENSURE THE TUBES ARE CLEAR AND STRAIGHT. THE DUMMY PROBE MUST BE A 50-INCH LONG BY 1.25-INCH PIECE OF STEEL PIPE AND PASS FREELY FROM TOP TO BOTTOM OF EACH TUBE.
- e) ACS, Inc, carries general liability insurance which is included in this estimate. ACS is not providing engineering services and does not provide professional E&O insurance. Client agrees that ACS's liability is limited to amount of total fees paid to ACS for this project.

Please sign below indicating you accept the above rates and terms and agree to pay in full within 30 days of receipt of invoice. Please return signed quote by fax.

This quote is valid for 90 days.

Company

Date

Print name & title

Signature

**CITY OF MOUNTAIN VIEW
MEMORANDUM**

DATE: December 8, 2010

TO: Urban Forestry Board

FROM: Robert Kagiya, Principal Civil Engineer

SUBJECT: STEVENS CREEK TRAIL—SLEEPER AVENUE TO DALE AVENUE/
HEATHERSTONE WAY—HERITAGE TREE REMOVAL AND
MITIGATION, PROJECT 10-42

RECOMMENDATION

Review the Heritage tree removal mitigation for two street trees and forward a recommendation to the City Council approving a tree planting mitigation of 1:1 replacement with 15-gallon trees for the Stevens Creek Trail—Sleeper Avenue to Dale Avenue/Heatherstone Way, Project 10-42.

FISCAL IMPACT

The cost of removing the two trees and replanting two mitigation trees are included in the \$5 million construction budget in Project 10-42. The \$5 million budget includes approximately \$1.7 million in State and regional grant funds, including an \$800,000 State River Parkways grant.

BACKGROUND

On November 18, 2009, the Urban Forestry Board approved a 3:1 tree planting mitigation for the removal of three Heritage trees for the construction of the Stevens Creek Trail—Sleeper Avenue Neighborhood Access Point over Highway 85 to the intersection of Dale Avenue and Heatherstone Way.

On July 27, 2010, the Council approved the Plans and Specifications, authorized staff to advertise the project for bids after receipt of the Caltrans encroachment permit and approved the removal of two Heritage trees and the Urban Forestry Board recommended mitigation measure of 3:1 replacement with 15-gallon trees. In early November, the City received the Caltrans encroachment permit and began the bid advertisement period on November 10, 2010.

In advance of constructing the pedestrian switchback structure on Dale Avenue/ Heatherstone Way (Attachment 1), PG&E will need to relocate a wooden utility pole and overhead electrical line, which is in conflict with constructing the proposed structure. Recently, PG&E informed the City that it plans to relocate the wooden pole to the other side of the street and rewire their overhead electrical lines from the west side to the new pole. The new electrical line will cross through the trunk line of two Heritage size Raywood ash street trees (Attachment 2).

Public Works staff and the City Arborist held a site meeting with PG&E. PG&E requires a 15' clearance on both sides of the electrical line. The location of the two street trees do not meet the clearance requirement and will interfere with PG&E's ability to maintain the line. There is one tree that is slightly skewed from the proposed electrical line but any attempt to heavily prune the tree as a means to save it is not practicable. The City Arborist concurred with PG&E's assessment that both trees will need to be removed before relocating the overhead line.

Staff is recommending the removal of the two Raywood ash street trees and is requesting a mitigation measure of 1:1 replacement with a 15-gallon-sized red horse chestnut tree. Because the new trees will be replanted in the same area and there is very limited space within the public right of way, a 1:1 replacement is recommended. The proposed tree species complies with PG&E's planting list and will grow no taller than 25' at maturity or well below and clear of the overhead electrical wires.

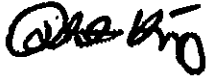
After PG&E reestablishes the overhead electrical line, the contractor will replant two 15-gallon trees as part of the Stevens Creek Trail construction. The City's Roadway Landscape Division will add the two trees to their water truck schedule and will continue to water the trees until the trees are established.

Overall, the trail construction will require the removal of 19 trees including 4 Heritage trees, and will plant a total of 111 trees including the 2 additional mitigation trees and 60 box-size trees (45—24" box, 11—48" box and 4—60" box). Although the November 2009 Urban Forestry Board recommended mitigation measure of 3:1 replacement with 15-gallon trees was later approved by Council, these mitigation trees will actually consist of 48" and 60" box-size trees and will be planted between the northerly end of the pedestrian switchback structure and the nearby apartment complex.

On January 11, 2011, Council is expected to take action to award a construction contract for the Stevens Creek Trail. Construction will begin in February 2011 and take approximately one year to complete. By fall 2011, staff will return to the Parks and Recreation

Commission to provide an update on the construction activities and completion schedule.

Prepared by:



Robert Kagiya
Principal Civil Engineer

Approved by:



David A. Muela
Community Services Director

RK/7/PWK
909-11-18-10M-E^

- Attachments
1. Rendering
 2. Photo Rendering of Conflict
 3. Tree Removal Notice

cc: Mr. Chris Hughes, PG&E
10900 North Blaney Avenue
Cupertino, CA 95014

Ms. Marilou Ayupan
Mark Thomas & Company
1960 Zanker Road
San Jose, CA 95112

PWD, PCE—Kagiya, POSM, ACE—Chen, Project File/c